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ART UNIT	PAPER NUMBER
2166	

DATE MAILED: 03/15/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

-- Th MAILING DATE of this communication app ars on the cover sheet with the correspondenc address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _10 November 1999_ .

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-20_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _1-20_ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☒ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on _10 November 1999_ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .

4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: .

DETAILED ACTION

Claims 1-20 are pending.

Specification

1.   The title of the invention is not descriptive. A new title is required that is clearly

indicative of the invention to which the claims are directed.

The following title is suggested: Method and System of Receiving and Storing

Travel Reservation Data.

2.   The disclosure is objected to because of the following: The description of the fare

validation process in the specification (page 20, lines 11-21) is confusing and conflicts

with the process as illustrated in Figure 5. The applicants indicate that two different

paths are followed if the fare is deemed invalid (i.e. not effective) at step "406" (in Figure

5). (In other words, the specification has two conflicting descriptions of the "no"

alternative illustrated in Figure 5) In lines 12-13, the applicants explain that if the

"effective date is later than the travel date, the fare is not valid" and the method

proceeds to step "414".   This is illustrated as the "no" alternative to step "406" in Figure

5. However, in lines 17-18, the applicants explain that if the fare is not effective (i.e. not

valid) as of the travel date as determined in step "406", the method proceeds to step

"407".

Appropriate correction is required.

Drawings

3.   The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5)

because they include the following reference sign(s) not mentioned in the description:

312 (Figure 4). In the specification, the number "310" (page 19, line 1) is used to refer

to the process illustrated by reference number "312" in Figure 4. A proposed drawing

correction, corrected drawings, or amendment to the specification to add the reference

sign(s) in the description, are required in reply to the Office action to avoid

abandonment of the application. The objection to the drawings will not be held in

abeyance.

Claim Rejections - 35 USC § 112

4.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

Claims 1,6, and 9 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention. The present claims now recite, "the server operable

to. . ." or " the server is further operable to. . . " perform various processes. However,

from the claim language, it is unclear whether or not the recited functions are positively

and definitely performed. Such a recitation is considered to be an improper functional

recitation that fails to particularly point out and distinctly claim the subject matter that the

Applicant regards as the invention. The Examiner suggests omitting the phrase

"operable to" and using of the phrase the "the server receives/associates/adds. . ." (or

similar language) instead of the currently recited claim language. For the purpose of

applying art, the Examiner will interpret the current claim language to mean that the

server does perform the claimed functions.

Claim Rejections - 35 USC § 102

5.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6.   Claims 1-3, 5-7, 12-14, 17-18, and 20 are rejected under 35 U.S.C. 102(b) as

being anticipated by Dettelbach et al. (US Patent no. 5,253,166

In reference to claim 1, Dettelbach et al teach a system for recording travel data

comprising:

- a data store (Figure 1B, col. 9, lines 27-29)—the relational database

- a server coupled to the data store (col. 3, lines 29-33), said server operable

    to:

    o   receive new reservation data conflicting with old reservation data in the

        data store; (col. 3, lines 36-44; column 12, lines 6-17)

        ▪   the new reservation data comprising a plurality of new

            attributes, (Figure 3-4)

        ▪   the reservation data in the data store comprising a format and a

            plurality of old attributes (Figures 3-4)

       o associate the new reservation data with a time stamp;

       o add the new reservation data and time stamp to the data store without

modifying the old attributes (column 12, lines 6-17)

Dettelbach et al teach a record-keeping system for maintaining travel reservation data.

The system is maintained on a PC (i.e. the server), receives information from at least

one central reservation system, and stores the current and historical travel reservation

data in a database (i.e. the data store) (col. 2, lines 29-35). The old and new

reservation data both include a number of attributes, as illustrated in Figures 3-4. (see

also col. 4, line 60-col. 6, line15) As the new data is received from a central reservation

system and processed for storage, a processing date (i.e. time stamp) is associated

with the new reservation data (col. 7, line 23) Dettelbach et al do not specifically

disclose that the old and new reservation data conflict with one another. However, as

the system receives daily reservation data updates from various customer reservation

system(s), it is respectfully submitted that the most recently downloaded data in each

update is not identical to the historical data that was previously received, even if this

data differs only by the date/time on which it was received by the system server. Thus,

the system server receives (i.e. is operable to receive) reservation data that conflicts

with the historical reservation data stored in the data store.

In reference to claim 2, Dettelbach et al teach a system wherein the old and new

(i.e. current and historical) reservation data are appended to flat files within the

database. (Figures 4, 5a, 5b, column 12, lines 6-17).

In reference to claim 3, Dettelbach et al teach a system that receives and stores the new reservation data and old reservation data. The old and new reservation data stored on the system's database includes airfare, travel departure/arrival times and arrival/departure cities (i.e. city pairs) associated with the airfare. (Figure 4)

In reference to claim 5, Dettebach et al teach a system wherein the format of the old reservation data differs from the format of the new reservation data. As the new data is received from the central reservation data, it is a ".RAW" file. (col. 4, lines 33-40) The new reservation data is then conditioned and is converted to the same output format as the historical reservation files maintained in the system's database. (col. 6, lines 57-67)

In reference to claim 6, Dettelbach et al teach a system for receiving and storing travel reservation data comprising:

- a data store; (Figure 1B; col. 9, lines 27-29)

- a server coupled to the data store, the server operable to:

  o receive new reservation data that conflicts with old reservation data in the data store; (col. 3, lines 36-44; column 12, lines 6-17)

  o associate the new reservation data with a time stamp;

  o add the received reservation data and time stamp to the data store without modifying the old reservation data (column 12, lines 6-17)

Dettelbach et al teach a record-keeping system for maintaining travel reservation data. The system is maintained on a PC (i.e. the server) and receives information from at least one central reservation system and stores the current and historical travel

reservation data in a database (i.e. the data store) (col. 2, lines 29-35). The old and

new reservation data both include a number of attributes, as illustrated in Figures 3-4.

(see also col. 4, line 60-col. 6, line15) These attributes include arrival and departure

cities, dates of travel and fares associated with the scheduled travel. (Figure 3)

Furthermore, as the new data is received from a central reservation system(s) and

processed for storage by the disclosed, a processing date (i.e. time stamp) is

associated with the new reservation data (col. 7, line 23) Dettelbach et al do not

specifically disclose that the old and new fare data conflict with one another. However,

as the system receives daily reservation data updates from various customer

reservation system(s), it is respectfully submitted that the most recently downloaded

fare data in each update is not identical to the historical fare data that was previously

received, even if this data differs only by the date/time on which it was received by the

system server. Thus, the system server receives (i.e is operable to receive) reservation

data (including fare data) that conflicts with the historical reservation data stored in the

data store.

In reference to claim 7, Dettelbach et al teach a system wherein the fare data is

associated with a service provider. (Figure 3). The travel data record includes

information on the fare, the service provider (e.g. the airline company), the flight number

and dates of travel.

In reference to claim 12, the limitations of this claim are as addressed by the

rejections of claims 5 and 6.

In reference to claim 13, Dettelbach et al teach a method for organizing travel

reservation data, comprising:

- receiving new reservation data that conflicts with old reservation data in a

    data store; (col. 3, lines 36-44; column 12, lines 6-17)

    o the new reservation data comprising a plurality of new attributes

        (Figures 3 and 4),

    o the reservation data in the data store comprising a plurality of old

        attributes (Figures 3 and 4)

- associating the new reservation data with a time stamp;

- adding the new reservation data and time stamp to the data store without

    modifying the old attributes(column 12, lines 6-17)

Dettelbach et al teach a method for maintaining records of travel reservation data. The

disclosed system receives information from at least one customer reservation system

and stores the current and historical travel reservation data in a database (i.e. the data

store) (col. 2, lines 29-35). The old and new reservation data both include a number of

attributes, as illustrated in Figures 3-4. (see also col. 4, line 60-col. 6, line15) As the

new data is received from a customer reservation system and is processed for storage,

a processing date (i.e. time stamp) is associated with the new reservation data (col. 7,

line 23) Dettelbach et al do not specifically disclose that the old and new reservation

data conflict with one another. However, as the system receives daily reservation data

updates from various customer reservation system(s), it is respectfully submitted that

the most recently downloaded data in each update is not identical to the historical data

that was previously received, even if this data differs only by the date/time on which it was received by the system server. Thus, the new reservation data received by the system server conflicts with the historical reservation data stored in the data store.

In reference to claim 14, the limitations of this claim are as addressed by claims 3 and 13, and are incorporated herein.

In reference to claim 17, Dettelbach et al teach a method wherein the old and new (i.e. current and historical) reservation data are appended chronologically to flat files within the database. (Figures 4, 5a, 5b, column 12, lines 6-17). Furthermore, the method distinguishes between old (historical) reservation data downloaded at an earlier time and new (current) reservation data more recently downloaded and uses this distinction to append old and new reservation the data into the data files (i.e. data tables) in the disclosed system's database. Therefore, it is respectfully submitted that the presence of time stamps associated with the new (and old) reservation data and their use in chronologically appending the reservation data files are inherent.

In reference to claim 18, Dettelbach et al teach a method further comprising synchronizing the new reservation data with an additional server. The new reservation data is regularly sent from the remote customer reservation system(s) (i.e. an additional server) to the server operating the disclosed system. (Figure 1A, col. 2, lines 30-35) In other words the reservation data from the customer reservation system server is synchronized with the data on the disclosed system's server. Dettelbach et al further teach that the reservation data in the disclosed system's main server are also filed in a parallel database on another (third) remote computer. (col. 9, lines 27-29)

Claim 20, Dettelbach et al teach a method wherein the attributes of the old and

new reservation data comprise one selected from the group consisting of: fares

associated with a service provider (see Figure 3), rules associated with a service

provider, and restrictions associated with a service provider.

Claim Rejections - 35 USC § 103

7.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

8.   Claims 4, 8-11, 15-16, and 19 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Dettelbach et al (US Patent No. 5,253,166)

In reference claim 4, Dettelbach et al teach a system wherein the new

reservation data are added to the data store. (col. 12, lines 6-17) Dettelbach et al do

not specifically teach that the time stamp is used as a key into the data store but does

teach that a time-related distinction is drawn between the types of data stored in the

database (i.e. historical vs. current data). At the time of the applicants' invention, it

would have been obvious to one of ordinary skill in the art to modify the teaching of

Dettelbach et al so that the time stamp is used as a key into the database. One would

have been motivated to do this to make it easier to identify, arrange, and retrieve the

reservation information from the data storage based on this time-related distinction.

As suggested by Dettelbach, (col. 2, lines 5-10), facilitating the organization and retrieval of reservation data is a primary advantage of the disclosed invention.

In reference to claims 8 and 10, Dettelbach et al teach the system of claims 6 and 7 above as explained in the rejections of claims 6 and 7. Dettelbach et al do not specifically teach that the data store comprises files indexed by city pair or indexed by city pair and by carrier. However, at the time of the applicant's (applicants') invention, it would have been obvious to one of ordinary skill in the art to modify the teaching of Dettelbach et al to index the reservation data files by city pair or by both city pair and carrier. As suggested by Dettelbach et al., one primary advantage of the invention is to facilitate the logical arrangement and retrieval of stored travel data by system users. (col. 1, lines 6-10; col. 2, lines 5-10). One would have been motivated to do index the data using various attributes of the data (i.e. city pair or city pair and carrier) so that the system's users could easily customize the organization and retrieval of the stored data files to suit individual preferences.

In reference to claim 9, the limitations of this claim are addressed by the rejections of claims 1 and 7. Dettelbach et al do not specifically teach the new and old reservation data comprise conflicting new and old rule data that are associated with a city pair. However, at the time of the applicant's invention, it would have been obvious to one of ordinary skill in the art to modify the system of Dettelbach et al to include old and new rule data among the types of information downloaded and updated by the disclosed system. One would have been motivated to do this to inform system users of guidelines and restrictions that are/were in effect when the travel arrangements are/were made.

As suggested by Dettelbach et al, advantages of the disclosed system include ensuring that the most accurate travel information is applied when travel is arranged for users of the disclosed system (col. 1, lines 16-25) and ensuring that these travel arrangements comply with all contractual travel policy guidelines (col. 11, lines 14-19).

In reference to claim 11, Dettelbach et al teach the system of claim 6 as explained in the rejection of claim 6. Furthermore, Dettelbach et al teach that the system assesses whether or not the stored reservation data comply with corporate and contractual travel policies. (col. 2, lines 52-56) Dettelbach et al do not specifically teach that the time stamp comprises an activation stamp that indicates when the server can initially use the reservation data. However, at the time of the applicants' invention, it would have been obvious to one of ordinary skill in the art to modify the system of Dettelbach et al to include an activation or effective date (i.e. activation stamp) with the reservation data downloaded by the disclosed system. One would have been motivated to do this to make certain that the disclosed system applies correct, date-appropriate guidelines and effective/active travel data when assessing whether the new and old reservations data comply with corporate and contractual travel policies.

In reference to claim 15, the limitations of this claim are as addressed by claims 4 and 13, and are incorporated herein.

In reference to claim 16, Dettelbach et al teach the method of claim 13 as explained in the rejection of claim 13. However, Dettelbach et al do not specifically teach a method further comprising dynamically processing a format of the old reservation data that differs from a format of the new reservation data using Prolog.

However, at the time of the applicants' invention, it would have been obvious to one of

ordinary skill in the art to modify the system/method of Dettelbach et al so that the data

is processed using Prolog, a programming language that deals with logical relationships

between items of data. One would have been motivated to do this to make this

modification so that the old and new reservation data is processed/interpreted in a

logical manner. As suggested by Dettelbach et al, the logical analysis and

interpretation of data is one of the advantages of the disclosed system (col. 2, line 40-

43).

In reference to claim 19, the limitations of this method claim are as addressed by

the rejection of claims 8 and 10 (system claims) and claim 13 (method claim), and are

incorporated herein.

Conclusion

9.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

- Chung et al (US Patent 5,644, 721) teach a system that manages
  reservations and ticketing data involving multiple currencies.

- Corzo ("Widely Used Amadeus Reservation System Keeps Travelers
  Connected") discloses the development of the Amadeus/System One central
  reservation system.

- Fairlie ("Continental, EDS agree on CRS Deal") provides information on the
  development of a central reservation system/product.

- Takada et al (JP 03001290) teach a system of synchronizing host server data and remote database data prior to issuing a negotiable instrument.

- Kimura (JP 03051987) teach a system/method for processing reservations data and issuing tickets using a vending machine.
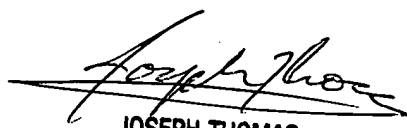
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rachel L. Porter whose telephone number is 703-305-0108. The examiner can normally be reached on M-F, 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Thomas can be reached on (703)305-9588. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

RP
March 6, 2002

JOSEPH THOMAS
SUPERVISORY PATENT EXAMINER
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